



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

C3
Job Sheet 175262



Part No: C3

Job Qty: 1 ea

Part Name: C-Series Remote Hook 3,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/2/18

Job Tracking No:

Due Date: 5/11/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG C3 Rev 2 IPP Rev A 18.03.29 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		5/10/18	0.00	0.00	Start Up Small Fab-4		18-05-26 AB
100	Small Fab	1 pcs		5/11/18	0.00	1.00	Small Fab-3		AP
110	QC	1 pcs		5/11/18	0.00	0.00	QC5		18-6-11
120	DC	1 pcs		5/11/18	0.00	0.00	DC		
130	Packaging	1 pcs		5/11/18	0.00	0.00	Packaging3-2		18.06.11
140	QC21-SA	1 Ea		5/11/18	0.00	0.00	QC21		18.06.11

Part Op 100 - 1- PICK C3-2-1 AND LASER ENGRAVE AS PER DWG . SEE NOTE 3 AND 4 ON SHEET 3. 2- ASSEMBLE AS
Descriptions: PER DWG

120 - - Photocopy blue file OM & OOPM-C3 Rev 4

130 - Identify and Stock

GLASK AEROSHELL NO. 7 (M138724) LOCTITE 620 (M138820) SAFT-EZE (M128063)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
188-FPSS-1032-1/4	Set Screw	2 Ea (2 ea)	90-Start up Operation	5049572505 8750
188-FSCS-832-5/8	Clock Spring Cover Screw	4 Ea (4 ea)	90-Start up Operation	5058763
2595K22	Heat Shrink Tube	1 Ea (1 ea)	100-Small Fab	5058861
32446	Crimp Terminal	2 Ea (2 ea)	100-Small Fab	5047075
8183K6	Wire Guide/Grip	1 (1 ea)	100-Small Fab	505875450 66720
AN4-16A	Bolt	3 Ea (3 ea)	100-Small Fab	505751950 68654
AN4-17A	Bolt	1 Ea (1 ea)	100-Small Fab	502772450 70163
AN6-15A	Bolt	1 Ea (1 ea)	100-Small Fab	5049842
AN960-10	Washer NAS1149F0363P	1 Ea (1 ea)	100-Small Fab	5013754450 28238
AN960-10L	Washer, #10 NAS1149F0332P	2 Ea (2 ea)	100-Small Fab	505752550 58383
AN960-416	Flat Washer Dia 1/4" NAS1149F0463P	8 Ea (8 ea)	100-Small Fab	5056461 68663
AN960-616L	5/8" OD, THIN FLAT WASHER NAS1149F0638P	2 Ea (2 ea)	100-Small Fab	5048297-1
C2-1-1 P	Manual Release Knob	1 Ea (1 ea)	100-Small Fab	5029232
C2-10-1 P	Lock Spring Pin	1 (1 ea)	100-Small Fab	5029231
C2-11-2 P	Locating Pin	2 (2 ea)	100-Small Fab	5029438
C2-3-1 P	Bearing DU	2 (2 ea)	100-Small Fab	5029243
C2-3-10	Latch Shaft	1 Ea (1 ea)	100-Small Fab	5046764
C2-3-11 P	Actuator	1 pcs (1 ea)	100-Small Fab	5029245
C2-3-2 P	Latch Roller Pin	1 (1 ea)	100-Small Fab	5029246
C2-3-2-1	Roller Pin Retaining Ring	2 Ea (2 ea)	100-Small Fab	5056845
C2-3-3	Latch Roller	1 (1 ea)	100-Small Fab	5062693
C2-3-3-1 P	Latch Roller DU Bearing	1 Ea (1 ea)	100-Small Fab	5029248

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																																											
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Description Work Order Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL.: 1 613 802-5200 Email: sales@dartero.com www.dartaerospace.com Container No: S074754 Part: C3 Job No: 175262 Serial No/Batch: S074754 Revision: 2 Inspector: Date: 05/26/18				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																																									
Root Cause <table style="width:100%; border-collapse: collapse;"> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table>		Environment	☐	No Re-verification	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐	<table style="width:100%; border-collapse: collapse;"> <tr> <td>☐ F</td> <td>☐ Contamination</td> <td>☐ Out of Sequence</td> <td>☐ Positioned Wrong</td> </tr> <tr> <td>☐ B</td> <td>☐ Countersink</td> <td>☐ Off-set</td> <td>☐ Outside Dimensions</td> </tr> <tr> <td>☐ C</td> <td>☐ Cut Too Short</td> <td>☐ Mislabeled</td> <td>☐ Over/Under tolerance</td> </tr> <tr> <td>☐ C</td> <td>☐ Instructions Incomplete/Unclear</td> <td>☐ Fit/Function</td> <td>☐ Part Incorrect</td> </tr> <tr> <td>☐ CUTS</td> <td>☐ Drill Holes</td> <td>☐ Misaligned/off center</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☐ Crushing</td> <td></td> <td></td> <td>☐ Part Moved</td> </tr> <tr> <td>☐ Heat Treat</td> <td></td> <td></td> <td>☐ Drawing</td> </tr> <tr> <td>☐ Wave/Twist in Tube</td> <td></td> <td></td> <td>☐ Finish</td> </tr> <tr> <td>☐ Marks/Chatter</td> <td></td> <td></td> <td>☐ Misread</td> </tr> <tr> <td></td> <td></td> <td></td> <td>☐ Turning Sequence</td> </tr> </table>				☐ F	☐ Contamination	☐ Out of Sequence	☐ Positioned Wrong	☐ B	☐ Countersink	☐ Off-set	☐ Outside Dimensions	☐ C	☐ Cut Too Short	☐ Mislabeled	☐ Over/Under tolerance	☐ C	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Part Incorrect	☐ CUTS	☐ Drill Holes	☐ Misaligned/off center	☐ Part Lost/Missing	☐ Crushing			☐ Part Moved	☐ Heat Treat			☐ Drawing	☐ Wave/Twist in Tube			☐ Finish	☐ Marks/Chatter			☐ Misread				☐ Turning Sequence
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C2-3-5	Spacer, Teflon	2 Ea (2 ea)	100-Small Fab	50292495058758
C2-3-6	Latch	1 Ea (1 ea)	100-Small Fab	5029250
C2-3-8	Actuator Bushing	2 Ea (2 ea)	100-Small Fab	5072543
C2-5-1	Actuator Stop	1 (1 ea)	100-Small Fab	5029254
C3-10-2	Lock Spring	1 Ea (1 ea)	100-Small Fab	5029262
C3-11-1	Side Plate - Solenoid C3-Hook	1 Ea (1 ea)	100-Small Fab	5029263
C3-12-1	Lock Bushing	2 Ea (2 ea)	100-Small Fab	5035073
C3-12-2	Lock Shaft - C3 Hook	1 Ea (1 ea)	100-Small Fab	5078009
C3-12-3	Lock - C3 Hook	1 (1 ea)	100-Small Fab	5029265
C3-12-4	Lock Roller	1 Ea (1 ea)	100-Small Fab	5029266
C3-12-5	Lock Roller Pin	1 Ea (1 ea)	100-Small Fab	5029267
C3-12-6	Lock Roller Pin Circlip	2 (2 ea)	100-Small Fab	5029268
C3-13-1	Keeper Bushing	2 (2 ea)	100-Small Fab	5029269
C3-13-4	KEEPER	1 (1 ea)	100-Small Fab	5029270
C3-13-5	Spring, Keeper	1 (1 ea)	100-Small Fab	5029271
C3-2-1	Side Plate C-3 Hook	1 Ea (1 ea)	100-Small Fab	5029273
C3-3-4	Link Pin	2 Ea (2 ea)	100-Small Fab	5029277
C3-3-4-1	Ring, Retaining	4 pcs (4 ea)	100-Small Fab	5033106 5029278
C3-3-7	Link	1 Ea (1 ea)	100-Small Fab	5032318
C3-3-9	Actuator Spring	1 (1 ea)	100-Small Fab	5048390
C3-4-1	Load Beam Bushing	2 Ea (2 ea)	100-Small Fab	5029280
C3-4-4A	C3 Load Beam Assy	1 Ea (1 ea)	100-Small Fab	5029281 5029282
C3-7-1	Load Beam Bumper	1 Ea (1 ea)	100-Small Fab	5062797
C3-7-2	Lock Bumper	2 Ea (2 ea)	100-Small Fab	5062793
C3-8-2	Solenoid	1 (1 ea)	100-Small Fab	5029285
C3-8-4	Solenoid Cover Gasket	1 (1 ea)	100-Small Fab	5029287
C3-8-5	Solenoid Cover	1 (1 ea)	100-Small Fab	5029288
C3-9-1	Clock Spring Cover - C3 Hook	1 (1 ea)	100-Small Fab	5029289
C3-9-2	Spring, Clock	1 (1 ea)	100-Small Fab	5029290
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	100-Small Fab	5054451
M27500-16TG2T14	Wire - 16-Gauge - Shielded	1 (1 ea)	100-Small Fab	5075144
MS21044N4	Nut, Self-Locking	4 Ea (4 ea)	100-Small Fab	5058122
MS21083-N3	Nut	2 Ea (2 ea)	100-Small Fab	5036469
MS21083N6	Nut	1 Ea (1 ea)	100-Small Fab	5036359
MS35266-63	Solenoid Cover Screw	1 Ea (1 ea)	100-Small Fab	5038767
MS35266-63	Solenoid Cover Screw	1 Ea (1 ea)	100-Small Fab	5038767

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	188-FPSS-1032-1/4	2	10	0
	188-FSCS-832-5/8	4	84	0
100-Small Fab	2595K22	1	8	0
	32446	2	234	0
	8183K6	1	0	0
	AN4-16A	3	129	0
	AN4-17A	1	272	0
	AN6-15A	1	12	0
	AN960-10	1	3,363	0
	AN960-10L	2	0	0
	AN960-416	8	0	0
	AN960-616L	2	0	0
	C2-1-1	1	0	0
	C2-10-1	1	0	0
	C2-11-2	2	0	0
	C2-3-1	2	0	0
	C2-3-10	1	28	0
	C2-3-11	1	0	0
	C2-3-2	1	0	0
	C2-3-2-1	2	100	0
	C2-3-3	1	0	0
	C2-3-3-1	1	30	0
	C2-3-5	2	0	0
	C2-3-6	1	0	0
	C2-3-8	2	8	0
	C2-5-1	1	0	0

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

C3-10-2	1	0	0
C3-11-1	1	0	0
C3-12-1	2	36	0
C3-12-2	1	0	0
C3-12-3	1	0	0
C3-12-4	1	0	0
C3-12-5	1	0	0
C3-12-6	2	0	0
C3-13-1	2	0	0
C3-13-4	1	0	0
C3-13-5	1	0	0
C3-2-1	1	0	0
C3-3-4	2	0	0
C3-3-4-1	4	66	0
C3-3-7	1	50	0
C3-3-9	1	0	0
C3-4-1	2	0	0
C3-4-4A	1	0	0
C3-7-1	1	0	0
C3-7-2	2	0	0
C3-8-2	1	0	0
C3-8-4	1	0	0
C3-8-5	1	0	0
C3-9-1	1	0	0
C3-9-2	1	0	0
EL-PLUG-M	1	53	0
M27500-16TG2T14	1	0	0
MS21044N4	4	12	0
MS21083-N3	2	0	0
MS21083N6	1	26	0
MS35266-63	2	45	0

Part Specifications

Specifications could not be found.

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Remote Cargo Hook Test Form

C3

MAKE SURE YOU ARE USING THE CORRECT TEST FORM FOR THE CORRECT SOLENOID!

NEW SOLENOID (152951-001)

Work Order 175262

Customer _____

Serial Number 5074754

Date Jun 11 2018

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/Fail
1	7,500	Static Hold	Hold for two minutes and reduce load to zero	N/A	Pass
10	1,500	Electircal, 25 volts	No "hang ups" permitted	N/A	Pass
2	3,000	Electircal, 22 volts	Current shall not exceed 12.8 A 9.6	A	Pass.
2	2,500	Electircal, 22 volts	Current shall not exceed 12.8 A 9.6	A	Pass.
2	2,000	Electircal, 22 volts	Current shall not exceed 12.8 A 9.6	A	Pass.
2	1,500	Electircal, 22 volts	Current shall not exceed 12.8 A 9.5	A	Pass.
2	500	Electircal, 22 volts	Current shall not exceed 12.8 A 9.5	A	Pass.
1	3,000	Electircal, 20 volts	Current shall not exceed 11.6 A 8.5	A	Pass.
1	3,000	Electircal, 28 volts	Current shall not exceed 16.2 A 11.7	A	Pass.
1	3,000	Manual		N/A	Pass.
1	3,000	Impact Test	Impact shackle 10x, shall not release	N/A	Pass.
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ω 2.0	Ω	Pass.
1	N/A	Electircal Continuity	Across both wires	N/A	Pass.

Test Conducted By: Luc Larivière
Technician

Submit

Signature: _____

QC 5 Small FAB / QA